

1.0 INTRODUCTION

PURPOSE

This programmatic biological assessment (BA) assesses the potential effects to the desert yellowhead (*Yermo xanthocephalus*) from management actions included in Resource Management Plans (RMPs) approved by the Wyoming Bureau of Land Management (BLM). The desert yellowhead is a federally listed threatened plant species. The objectives of this BA are to:

- Summarize the biology of the desert yellowhead, including its known and potential distribution in Wyoming;
- Review pertinent RMPs, RMP amendments, and RMP maintenance actions and identify management actions with the potential to affect the desert yellowhead or its habitat;
- Assess the potential effects of actions proposed in the RMP on the desert yellowhead and its habitat;
- Prepare an effects determination for the desert yellowhead on each program identified in the RMPs; and
- Describe mitigative measures to reduce or eliminate adverse effects on the species.

The analysis area for each management action is based on the boundaries specified in the individual RMPs. These boundaries are described in the analysis section for each RMP. The determination is based on the nature of each management action as described in the RMP and on the available data for the desert yellowhead for the area that is affected by the management action. Critical habitat for the desert yellowhead is also addressed in this BA.

ORGANIZATION OF REPORT

This BA is organized into five sections, as described below:

1.0 Introduction – describes the purpose of the analysis, the scope of the biological assessment, the action area, and the methods used for this BA.

2.0 Species Information – summarizes the current listing status, species ecology, abundance and distribution in Wyoming, and threats to the desert yellowhead.

3.0 Habitat Information – summarizes the process to select the size and location of designated critical habitat within the Lander Field Office (FO).

4.0 Analysis of Resource Management Plan – summarizes the Lander RMP, describes habitat and occurrence of the desert yellowhead within the area affected, analyzes the effects from management actions authorized under each program, and includes an effects determination specific to each management action for the RMP.

5.0 Conservation Strategies – provides management direction to further reduce potential effects to the desert yellowhead. These strategies were prepared in coordination with the U.S. Fish and Wildlife Service (USFWS) office in Cheyenne, Wyoming.

METHODS

Literature was reviewed to gather information on the ecology and habitat of the desert yellowhead. Biologists from the Lander FO of the BLM were contacted as part of this review. In an effort to collect the most recent information on ecology, occurrence, and listing status, USFWS personnel in the Cheyenne, Wyoming, office were contacted. The *Endangered and Threatened Wildlife and Plants: Listing the Desert Yellowhead as Threatened, Final Rule* was reviewed (USFWS 2002). The Wyoming Natural Diversity Database (WYNDD) was used to provide current data on element occurrence and habitat distribution.

After the information on distribution for the desert yellowhead was reviewed, the Lander RMP was identified as the only RMP with the potential to affect the desert yellowhead. Therefore, this BA assesses the potential management actions included in the Lander RMP (BLM 1987) that apply to the Lander FO (**Map 1**) and have the potential to affect the desert yellowhead. The Lander RMP was reviewed and the management actions it proposes are summarized in Chapter 4. Determinations in this BA are provided for each program type and management action described in the Lander RMP. Critical Habitat was designated March 16, 2004 (USFWS 2004). This BA will also analyze the effects of BLM-authorized activities on critical habitat.

The desert yellowhead is known from only one population that occurs in a single location within the Lander FO. The RMPs for the remaining BLM FOs in Wyoming were not included in this assessment because the desert yellowhead is not known or expected to occur within their administrative boundaries. Therefore, the desert yellowhead would not be affected by actions in these RMPs.

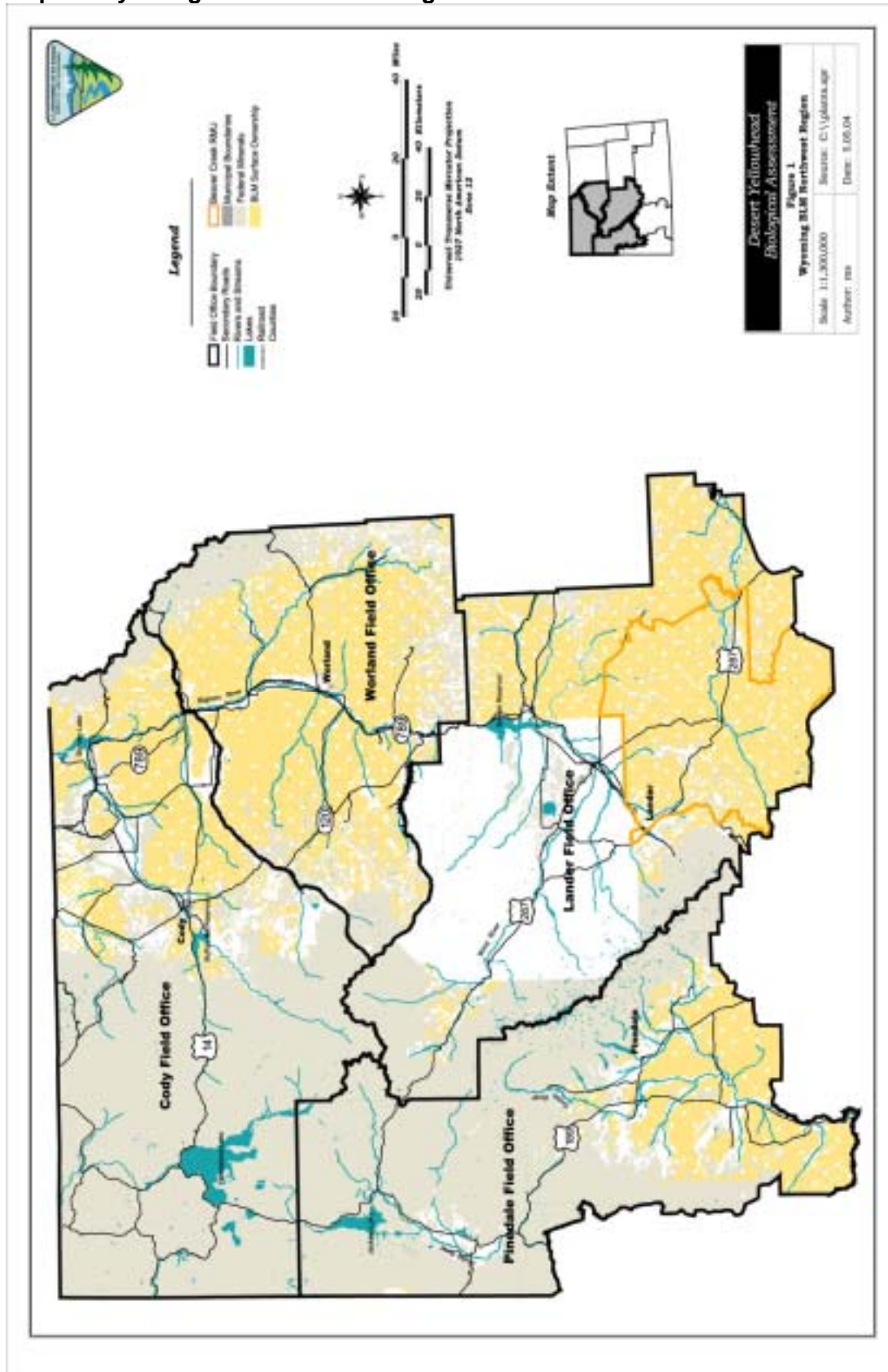
After the RMP was reviewed, management actions were analyzed for their potential to directly or indirectly affect individual desert yellowheads and conditions at the site (**Map 2**). Proposed federal actions also were evaluated for their potential to directly and indirectly affect the desert yellowhead.

The results of the effects analysis were used to develop a determination of effects on the desert yellowhead for each program described in the Lander RMP. Each determination was based on the management prescription described and any measures set forth to minimize the effects specified in the RMP. Conservation measures presented in the Conservation Strategies section of this BA were not included in the RMP; however, the BLM has committed to implementing these.

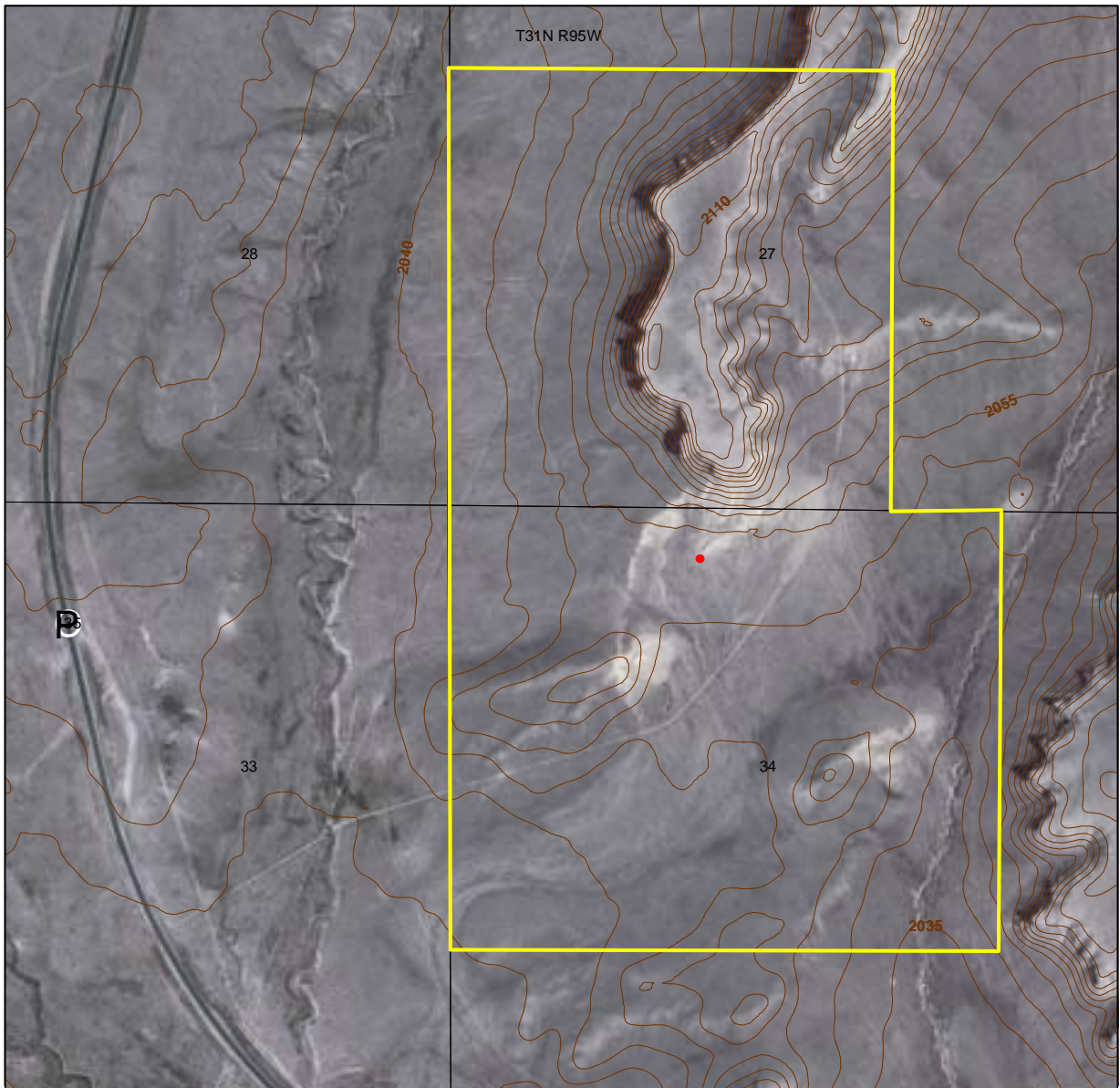
These measures are considered in the effects determinations if the BLM commits to their implementation. The following three categories are possible effects determinations:

- **No effect;**
- May affect, but is **not likely to adversely affect** due to:
 - Beneficial effects,
 - Discountable effects,
 - Insignificant effects; or
- May affect, is **likely to adversely affect**.

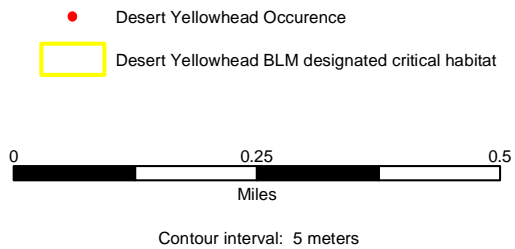
Map 1: Wyoming BLM Northwest Region



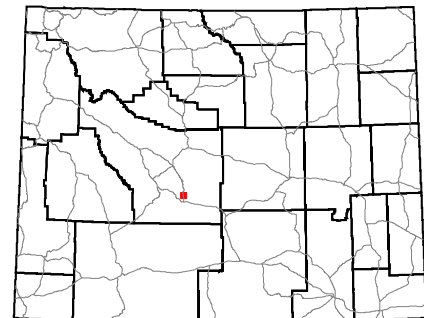
Map 2: Desert Yellowhead Population



Map 2



No warranty is made by the Bureau of Land Management for the use of the data for purposes not intended by the Bureau of Land Management.



These determinations are further defined in the USFWS Endangered Species Consultation Handbook (USFWS 1998a), as summarized in the following text.

“No effect” means there are absolutely no effects to the species or its critical habitat, either positive or negative. A no effect determination does not include small effects or effects that are unlikely to occur. If effects are insignificant (in size) or discountable (extremely unlikely), a determination of “not likely to adversely affect” is appropriate.

“Not likely to adversely affect” means that all effects to the species or its critical habitat are beneficial, insignificant, or discountable. Beneficial effects have contemporaneous positive effects without adverse effects to the species (for example, there cannot be “balancing,” so that the benefits of the action would outweigh the adverse effects). Insignificant effects relate to the size of the impact and should not reach the scale where take occurs. Discountable effects are considered extremely unlikely to occur. Based on best judgment, a person would not: (1) be able to meaningfully measure, detect, or evaluate insignificant effects; or (2) expect discountable effects to occur (USFWS 1998a). Determinations of “not likely to adversely affect, due to beneficial, insignificant, or discountable effects” typically require written concurrence from USFWS.

“Likely to adversely affect” means that the action would have an adverse effect on the species. Any action that would result in take of an endangered or threatened species is considered an adverse effect. A combination of beneficial and adverse effects is still considered “likely to adversely affect,” even if the net effect is neutral or positive. Adverse effects are not considered discountable because they are expected to occur. In addition, the probability of occurrence must be extremely small to qualify as discountable effects. Likewise, an effect that can be detected in any way or that can be meaningfully articulated in a discussion of the results of the analysis is not insignificant; it is an adverse effect.

The Endangered Species Act (ESA) does not prohibit incidental take of listed plant species. Furthermore, Sections 7(b)(4) and 7(o)(2) of the ESA generally do not apply to listed plant species. Limited protection of listed plants from take is provided to the extent that the ESA prohibits the removal, reduction in habitat, and possession of federally endangered plants. It also prohibits the malicious damage of these plants on areas under federal jurisdiction and destruction of endangered plants on non-federal areas in violation of state law or regulation or during any violation of a state criminal trespass law.